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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|--------------------------------|------------------|
| 10/532,599 | 12/07/2005 | John Gerard Cronin | P70563US0 | 9455 |
| 136 | 7590 | 07/18/2006 | | |
| JACOBSON HOLMAN PLLC 400 SEVENTH STREET N.W. SUITE 600 WASHINGTON, DC 20004 | | | | |
| | | | EXAMINER MARCANTONI, PAUL D | |
| | | | ART UNIT 1755 | PAPER NUMBER |

DATE MAILED: 07/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-------------------------------|-------------------------------------|--|
| Office Action Summary | Application No. 10/532,599 | Applicant(s) CRONIN, JOHN GERARD | |
| | Examiner Paul Marcantoni | Art Unit 1755 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 31-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 31-60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 31-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over FR 7338465 (from p.3 of applicants' specification), Kitsugi et al. '284, Webster et al. '130, Lazovsky et al. '674, or St. Louis '587 alone or in view of Doyle (GB 2,351,283).

FR 7338465 teaches using household, agricultural, or forestry waste which contains sludge of wastewater and treating the waste material with quicklime before adding cement and aggregate. It is the examiner's position that quicklime addition would lead to a pH in the result of greater than 11.5 thus meeting applicants' claims.

Kitusugi et al. teach making a concrete like substance by mixing sludge and Portland cement and further ^{teaches} ~~teaches~~ adding alkali sulphate, gypsum dihydrate, gypsum anhydride, etc.

Webster et al. '130 teach mixing sewage sludge with lime, fly ash, and alkaline earth metal (ie calcium sulfates) sulfates which harden into a concrete like mass. The lime and fly ash would lead to a pH of greater than 11.5. Webster also adds cement material such as calcium sulfate to form a concrete like mass.

Lazovsky et al. '674 teach using washing waste water sludge as the water component for making concrete. (see claims).

St. Louis teaches mixing pain sludge containing water (thus a "waste water sludge") and mixing the sludge with quick lime (alkaline substance) which would raise

Art Unit: 1755

the pH to greater than 11.5 and further mixing with making asphalt, mortar, or concrete (see claims and col.1, lines 10-17).

Doyle (GB '283) teaches that it is old in the art to treat waste material such as sewage (waste water) sludge by adding quicklime to the sludge to elevate the pH of the sludge which stabilizes the sludge and reduces the odor (p.2, lines 5-10). Doyle further teaches that it is most advantageous to raise the pH by adding a lime material such as quicklime to a pH of at least 12 (p.3, line 22) thus overlapping applicants' claimed range of in excess of 11.5 for pH. Thus, it would have been an advantageous design choice to stabilize sludge and especially reduce its odor before adding to a concrete mixture. The failure to treat with quicklime would lead to a very obnoxious and foul smelling cement product and Doyle teaches that odors can be removed for sewage sludge by this treatment. One of ordinary skill in the art would have understood that he or she could remove waste water/sewage sludge odors first prior to adding the sludge to a cement mixture to form concrete and thus the treatment of sewage sludge to remove odor prior to adding to make concrete would have been understood and obvious to one of ordinary skill in the art. It would have been an obvious design choice to use Doyle's treatment to remove odors for all sewage/waste water sludges to remove odor prior to adding to cement to make concrete.

The final concrete product would also have been obvious to one of ordinary skill in the art because the method of making the concrete product from wastewater sludge is old and known in the art.

Also, the use of a holding container such as a heavy duty plastic container to hold the blended concrete mixture is also a design choice for one of ordinary skill in the art. The person of ordinary skill in the art could use any type of container from glass, metal, wood, plastic, ceramic, etc. and the choice of material for container or use of a container to hold a cement mixture is not a patentable distinction over the prior art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Marcantoni whose telephone number is 571-272-1373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Paul Marcantoni
Primary Examiner
Art Unit 1755